

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of)
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Walter Best, et al.) Art Unit: To be assigned
)
Serial No. To be assigned) Examiner: To be assigned
)
Filed: Concurrently Herewith)
)
Title: FILTER DEVICE) Attorney Docket No. 16202.640

Honorable Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

Prior to the initial examination of the above-identified patent application, please amend the above application as follows:

IN THE CLAIMS:

4. The filter device as defined in Claim 1, wherein the first filter element(s) (2, 12, 22, 23) is/are surrounded by the second filter elements (3 through 6; 13 through 20; 24, 25).

5. The filter device as defined in Claim 1, wherein the second filter elements (3 through 6; 13 through 20; 24, 25) are also made of electrically conductive ceramic material.

7. The filter device as defined in Claim 1, wherein the second filter elements (3, through 6; 13 through 20; 24, 25) are made of an electrically nonconductive ceramic material.

8. The filter device as defined in Claim 1, wherein the thermal conductivity of the second filter elements (3 through 6; 13 through 20; 24, 25) is greater than or less than that of the first filter element (1, 12) or first filter elements (22, 23).

9. The filter device as defined in Claim 1, wherein contact layers are arranged between the filter elements (2 through 6; 12 through 20; 22 through 25).

11. The filter device as defined in Claim 9, wherein the contact layers are electrically conductive.

13. The filter device as defined in Claim 9, wherein the contact layers directly connect the filter elements (2 through 6; 12 through 20; 22 through 25).

14. The filter device as defined in Claim 9, wherein the contact layers are configured as separate layers with no material connection to the filter elements (2 through 6; 12 through 20; 22 through 25).

15. The filter device as defined Claim 9, wherein the thermal conductivity of the contact layers is of the same order of magnitude as that of the first and/or second filter elements (2 through 6; 13 through 20; 22 through 25).

16. The filter device as defined in Claim 1, wherein the filter elements (2 through 6; 12 through 20; 22 through 25) comprise, next to and alternating with one another, inflow conduits and outflow conduits that are separated by porous, filtrationally effective longitudinal walls, the inflow conduits being open on the inflow side and closed on the outflow side, and the outflow conduits being closed on the inflow side and open on the outflow side.

18. The filter device as defined in Claim 1, wherein the outer walls of the filter elements (2 through 6; 12 through 20; 22 through 25) are of particle-tight, in particular gas-tight, configuration.

19. The filter device as defined in Claim 1, wherein the outer walls of the filter elements (2 through 6; 12 through 20; 22 through 25) have a rectangular, square, oval, round, and/or shell-shaped cross section.

20. The filter device as defined in Claim 1, wherein the filter element group(s) (1, 11, 21) is/are surrounded by a housing having a gas inlet and gas outlet.

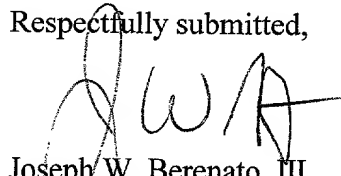
22. The filter device as defined in Claim 1, wherein the filter elements (2 through 6; 12 through 20; 22 through 25) and if applicable the contact layers have substantially the same expansion coefficients over the operating temperature range.

REMARKS

The preceding amendment has been made to cancel the multiple dependent claims appearing in the application. The claims are now in condition for examination.

It is believed that no charges are due for this submission. However, if this is incorrect, then please debit Account 50-0548 and notify the undersigned.

Respectfully submitted,



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APPENDIX

4. The filter device as defined in [one of Claims 1 through 3] Claim 1, wherein the first filter element(s) (2, 12, 22, 23) is/are surrounded by the second filter elements (3 through 6; 13 through 20; 24, 25).

5. The filter device as defined in [one of Claims 1 through 4] Claim 1, wherein the second filter elements (3 through 6; 13 through 20; 24, 25) are also made of electrically conductive ceramic material.

7. The filter device as defined in [one of Claims 1 through 4] Claim 1, wherein the second filter elements (3, through 6; 13 through 20; 24, 25) are made of an electrically nonconductive ceramic material.

8. The filter device as defined in [one of Claims 1 through 7] Claim 1, wherein the thermal conductivity of the second filter elements (3 through 6; 13 through 20; 24, 25) is greater than or less than that of the first filter element (1, 12) or first filter elements (22, 23).

9. The filter device as defined in [one of Claims 1 through 8] Claim 1, wherein contact layers are arranged between the filter elements (2 through 6; 12 through 20; 22 through 25).

11. The filter device as defined in Claim 9 [or 10], wherein the contact layers are electrically conductive.

13. The filter device as defined in [one of Claims 9 through 12] Claim 9, wherein the contact layers directly connect the filter elements (2 through 6; 12 through 20; 22 through 25).

14. The filter device as defined in [one of Claims 9 through 12] Claim 9, wherein the contact layers are configured as separate layers with no material connection to the filter elements (2 through 6; 12 through 20; 22 through 25).

15. The filter device as defined in [one of Claims 9 through 14] Claim 9, wherein the thermal conductivity of the contact layers is of the same order of magnitude as that of the first and/or second filter elements (2 through 6; 13 through 20; 22 through 25).

16. The filter device as defined in [one of Claims 1 through 15] Claim 1, wherein the filter elements (2 through 6; 12 through 20; 22 through 25) comprise, next to and alternating with one another, inflow conduits and outflow conduits that are separated by porous, filtrationally effective longitudinal walls, the inflow conduits being open on the inflow side and closed on the outflow side, and the outflow conduits being closed on the inflow side and open on the outflow side.

18. The filter device as defined in [one of Claims 1 through 17] Claim 1, wherein the outer walls of the filter elements (2 through 6; 12 through 20; 22 through 25) are of particle-tight, in particular gas-tight, configuration.

19. The filter device as defined in [one of Claims 1 through 18] Claim 1, wherein the outer walls of the filter elements (2 through 6; 12 through 20; 22 through 25) have a rectangular, square, oval, round, and/or shell-shaped cross section.

20. The filter device as defined in [one of Claims 1 through 19] Claim 1, wherein the filter element group(s) (1, 11, 21) is/are surrounded by a housing having a gas inlet and gas outlet.

22. The filter device as defined in [one of Claims 1 through 21] Claim 1, wherein the filter elements (2 through 6; 12 through 20; 22 through 25) and if applicable the

contact layers have substantially the same expansion coefficients over the operating temperature range.